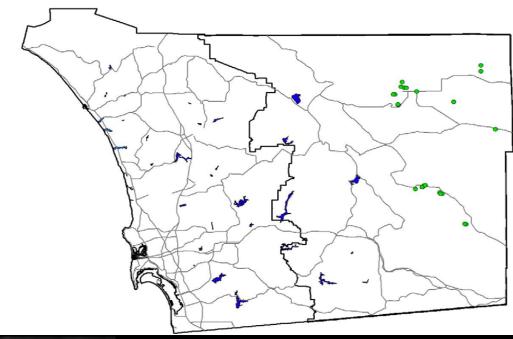
# Mammals found within East County MSCP Study Area

PowerPoint presentation by:
Scott Tremor, San Diego Natural History Museum

#### Macrotus californicus California leaf-nosed bat

- Distribution in San Diego County (and California) limited almost exclusively to deserts.
- Overall population status unknown. (D. Stokes)



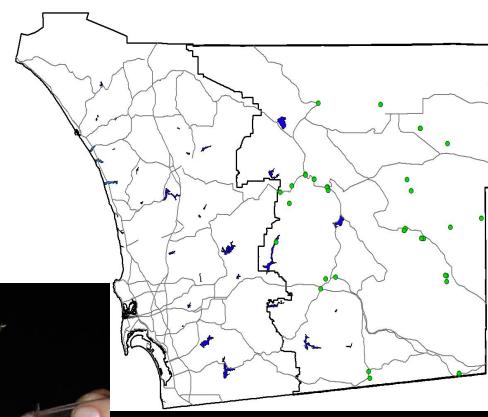


#### Antrozous pallidus

#### Pallid bat

• Sensitive to loss of foraging habitat from agricultural, landscape (golf courses, parks, etc), and urban developments.

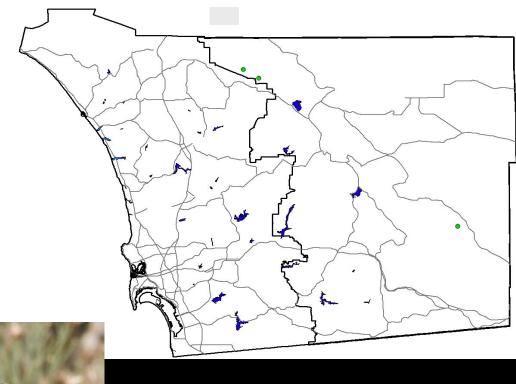
 Vulnerable to extirpation at roosts in man-made structures. (D. Stokes)





#### Euderma maculatum Spotted bat

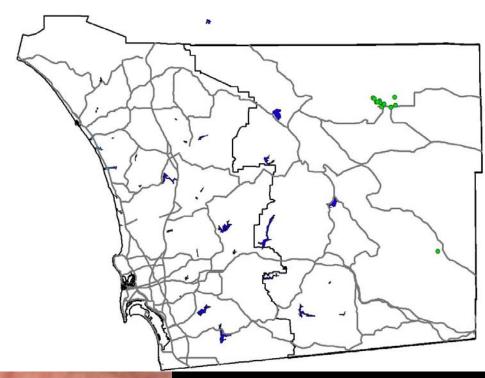
- Appears to be extremely rare throughout its range
- May be found at all elevations in East County.
- Closely associated with cliff habitat





#### Lasiurus xanthinus Western yellow bat

- Native fan palm specialist
- East County could be important migratory stopover/thoroughfare for all lasiurines
- Vulnerable to wind farms, agriculture, and golf courses

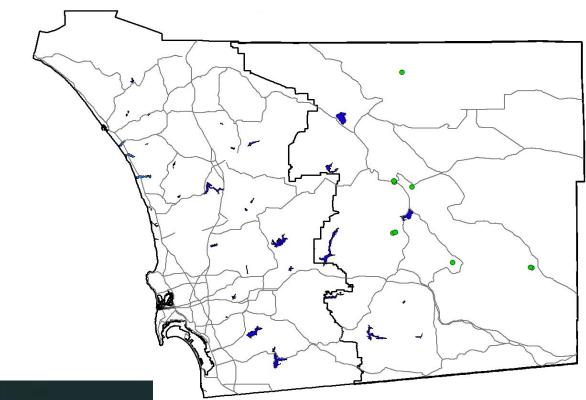




#### Myotis volans

#### Long-legged myotis

- Appears extremely rare in California, particularly in the southern part of the state. True population status unknown.
- Sensitive to commercial timber harvest, forest management, and forest fires.

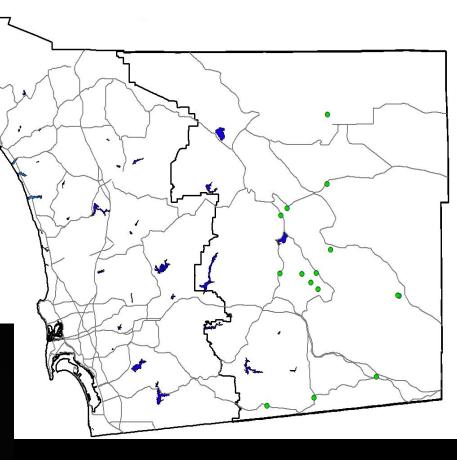




#### Corynorhinus townsendii

Townsend's big-eared bat

 Has apparently experienced declines throughout state.
 Sensitive to disturbance at roosts.



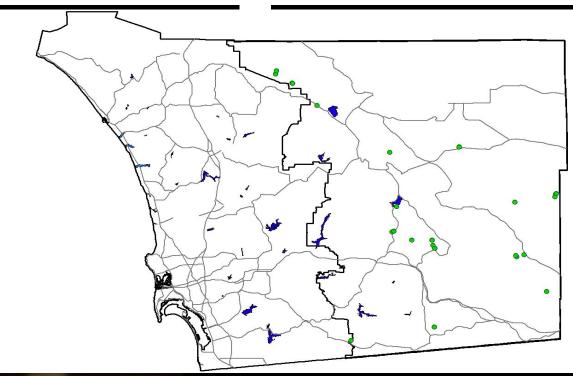


 May be sensitive to loss of woodlands and vegetation structure from frequent fire, grazing, agriculture, etc.
 (D. Stokes)

#### Eumops perotis

#### Western mastiff bat

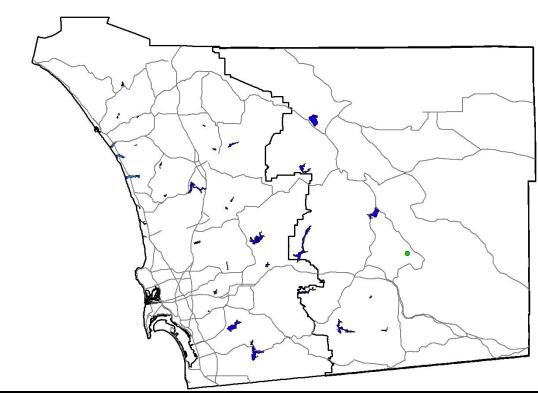
• Sensitive to large-scale developments of natural habitats. Cliff roosts vulnerable to quarrying, recreational rock climbing, road construction, water impoundments, etc.





# Nyctinomops macrotis Big free-tailed bat

- Rare in California.
   Population status unknown
- Cliff roosts vulnerable to rock mining, recreational rock climbing, road construction, water impoundments, etc.

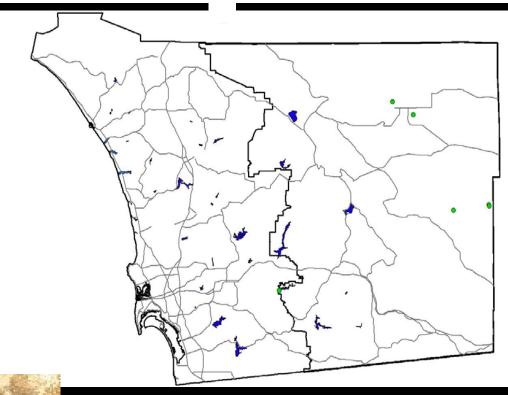




#### Nyctinomops femorosaccus

#### Pocketed free-tailed bat

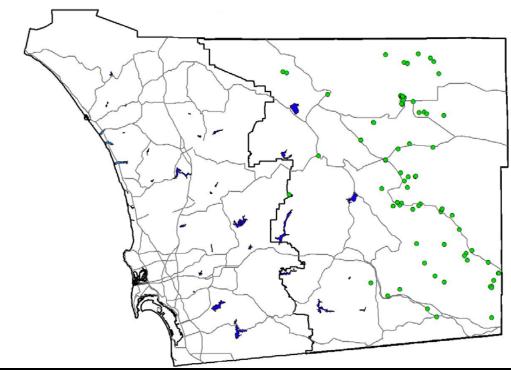
- Current status unknown
- Limited information for east county MSCP area.





#### Lepus californicus bennettii Black-tailed jackrabbit

- Eliminated by urbanization; apparently highly sensitive to habitat fragmentation.
- Nearly or completely extirpated from coastal lowland, so conservation in San Diego County may depend on the east county MSCP.



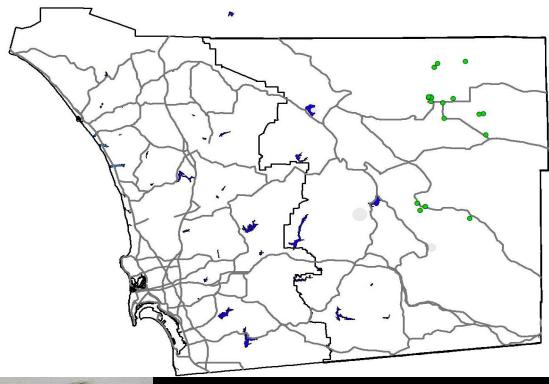


• Records for the Anza–Borrego Desert represent another subspecies, not *bennetti*.

#### Spermophilus tereticaudus

#### Round-tailed ground squirrel

• A recent (unpublished) revision of this species extends the distribution of *S. t. chlorus* to the Borrego Valley and recognizes a new subspecies in Mason Valley (and possibly elsewhere in the southern Anza–Borrego Desert).

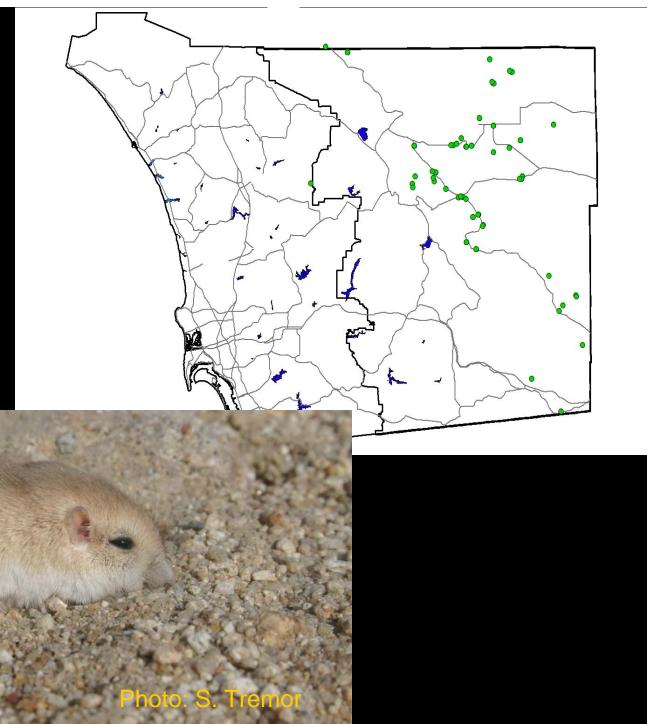




• Restricted to sandy soil on floors of desert valleys. Current status of distinctive dark population in Mason Valley unknown.

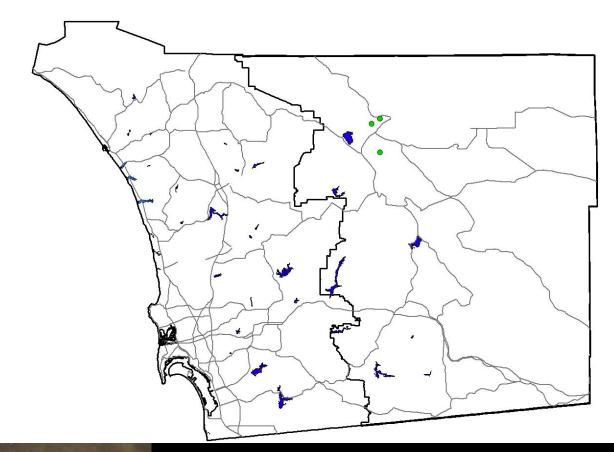
# Perognathus longimembris Little pocket mouse • Four subspecies in county. Three, all CSC, are found in

• Four subspecies in county. Three, all CSC, are found in East County: *P.I. bangsi, P.I. brevinasus, P.I. internationalis* 



### *Dipodomys stephensi*Stephens' kangaroo rat

• Species' range is greatly reduced by urbanization and direct and indirect affects of agriculture. Currently known to occur within east county MSCP area in Lake Henshaw basin only. Predictive modeling suggests other potential locations within the area.



# Photo: M. Peterson

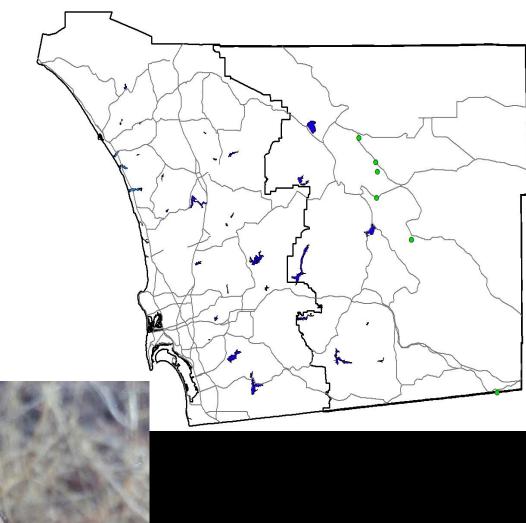
#### Henshaw basin:

- Largest population remaining
- Most extensive contiguous habitat in species' range

## Onychomys torridus ramona Southern grasshopper mouse

• Very uncommon in the county. Currently known to persist in the Jacumba area and around Scissors Crossing.

• Currently a CSC, though there is discussion amongst southern CA mammalogist to elevate this status.



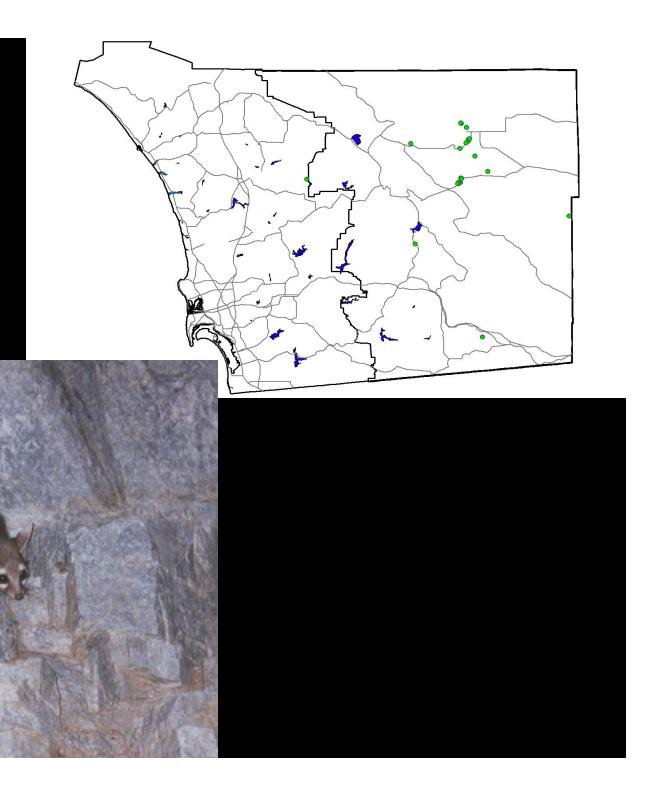


#### Bassariscus astutus

#### Ringtail

 Only a few well documented locations: Mt. Woodson, Laguna Mtns., Montezuma Grade.

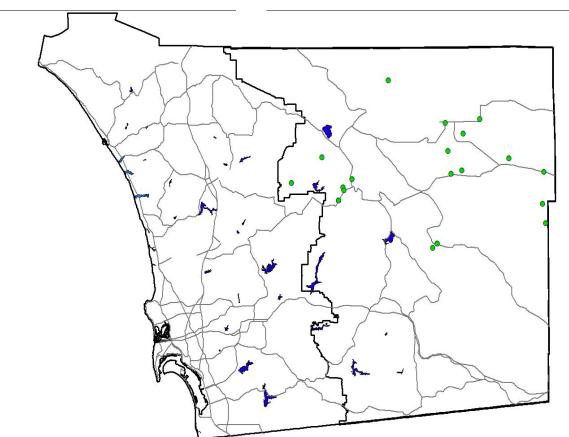
• Other populations persist but are thought to be much smaller.



#### Taxidea taxus

#### Badger

- Populations appear to be declining rapidly due to agriculture and urban development
- Nearly or completely extirpated from coastal lowland, so conservation in San Diego County may depend on the east county MSCP.





#### Ovis canadensis nelsoni

#### Peninsular bighorn sheep

- Sensitive to disease, predation, drought, and urbanization
- Population has declined rapidly since the 1970's



